

CLAIMS

1. A method of compensating for an inoperative nozzle in a printhead, the method comprising the step of:
 - 5 (a) mapping dot data intended for the inoperative nozzle into one or more operative nozzles of the printhead.
2. A method according to claim 1, wherein step (a) includes the substep of mapping the dot data intended for the inoperative nozzle into a nozzle that will print a dot on print media close to a position at
10 which the inoperative nozzle would have printed a dot had it been operative.
3. A method according to claim 1, wherein step (a) includes the substep of mapping the dot data intended for the inoperative nozzle into a nozzle that will print a dot on print media immediately adjacent a position at which the inoperative nozzle would have printed a dot had it been operative.
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4. A method according to 1, wherein step (a) includes the substeps of:
 - (i) determining one or more operative nozzles capable of printing a dot on print media close to a position at which the inoperative nozzle would have printed a dot had it been operative; and
 - (ii) mapping the dot data from the inoperative nozzle to an operative nozzle determined in substep (i).
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5. A method according to claim 4, wherein, in the event more than one operative nozzle is determined in substep (i), the dot data is remapped to one of the operative nozzles that will print a dot on print media closest to that which would have been printed by the inoperative nozzle.
- 25 6. A method according to claim 5, wherein, during successive firings of the printhead, the dot data is remapped alternately to operative nozzles that will print a dot on print media either side of that which would have been printed by the inoperative nozzle.
7. A method according to claim 5, wherein, during successive firings of the printhead, the dot data is
30 remapped randomly, pseudo-randomly, or arbitrarily to operative nozzles that will print a dot on print media either side of that which would have been printed by the inoperative nozzle.
8. A method according to claim 1, the printhead including a plurality of sets of the nozzles for printing a corresponding plurality of channels of dot data, wherein step (a) includes the substep of mapping the dot
35 data intended for the inoperative nozzle into one or more operative nozzles from the same set.
9. A method according to claim 8, wherein step (a) includes the substep of mapping the dot data into one or more operative nozzles that will print a dot on print media close to a position at which the inoperative nozzle would have printed a dot had it been operative.
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10. A method according to claim 8, wherein step (a) includes the substep of mapping the dot data intended for the inoperative nozzle into one or more operative nozzles including at least one nozzle from a different one of the sets.
- 5 11. A method according to claim 8, wherein step (a) includes the substeps of:
determining which combination of one or more available operative nozzles near the inoperative nozzle will minimise perceived error in an image that the dot data forms part of, the determination being performed on the basis of a color model; and
mapping the dot data intended for the inoperative nozzle to that combination of one or more
10 operative nozzles.
12. A method according to claim 11, wherein the inoperative nozzle is associated with a black print channel, and wherein step (a) includes remapping the dot data intended for the inoperative nozzle into a plurality of operative nozzles in other color channels to produce a process black output at or adjacent a
15 location on print media where the inoperative nozzle would have deposited a droplet of a black printing substance in accordance with the dot data.
13. A method according to claim 1, wherein a plurality of dot data intended for a corresponding plurality of inoperative nozzles are mapped to operative nozzles.
- 20 14. A printer controller configured to implement the method of claim 1.
15. A printer controller configured to implement the method of claim 1 to a printhead comprising a plurality of the nozzles.
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